UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

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OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Mr. Francis J. Schwindt
Chief, Environmental Health Section
North Dakota Department of Health
P.O. Box 5520
Bismarck, ND 58506-5520

Dear Mr. Schwindt:

This is in response to your September 7, 2001, follow-up letter to our conversation at the ECOS meeting. It addresses the issues and concerns you raised about the Prevention of Significant Deterioration (PSD) program, and I hope that this information will assist you in managing the air quality planning program in North Dakota.

You mentioned two main issues in your letter. Your first issue of concern was regarding the modeling methodology used to track increment, and, more specifically, your desire to use continuous emissions monitor (CEM) data to replace calculated emissions values based on permit limits. As discussed below, we generally agree that CEM data more accurately describe emissions than calculated values, but the ultimate purpose for determining emissions must be kept in mind when deciding specifically how these data will be applied in a regulatory context.

The EPA's recommended procedure for modeling impacts from increment consuming sources is to acquire emissions data from the most recent 2 consecutive years, in order to characterize the full range of typical emissions patterns, and 5 years of meteorology data, in order to account for variability in weather patterns from year-to-year. As you know, the purpose of the increment modeling is to use these inputs to identify whether an increment violation is likely to occur in the future under realistic emissions and meteorology conditions. In contrast, the use of CEM data paired with corresponding, or same hour, meteorological data would only serve to document whether an increment violation took place over the period of time being modeled, not to realistically assess whether violations are likely under expected emissions and weather conditions over time. For this reason, we have no objection to your use of CEM data to determine a single emissions value that represents actual emissions patterns for each source, but we believe that you should use two consecutive years of CEM data to determine the maximum, or near maximum, emission rate, just as you would if you were using permitted potential emissions. That single emissions value for each source would then be modeled over 5 years of meteorological data to identify expected increment violations under realistic conditions.

Your second PSD issue concerns how the Federal Land Manager (FLM) certifications and variance procedures in the Clean Air Act (CAA or the Act) affect increment. Just as an overview, the PSD program is designed to prevent the construction of sources that would cause or contribute to the violation of an increment or National Ambient Air Quality Standard (NAAQS), or that would have an adverse impact on a Class I area Air Quality Related Value (AQRV). The FLM's job, under the Act, is to protect Class I AQRVs, while it is the job of EPA and the States to protect the increment and the NAAQS. Under CAA Section 165(a)(3) and our rules (40 CFR 51.166(k)(2)), a permit applicant must demonstrate that the emissions from the proposed source will not cause or contribute to pollutant concentrations in excess of any applicable increment. In the case of a Class I increment violation, a source may be granted a variance under certain conditions. First, the source must demonstrate to the FLM, and the FLM certify to the State, that the source will not adversely impact any Class I AQRVs. Second, the State must revise its SIP to correct increment violations (CAA Sections 161 and 163, 40 CFR 51.166(a)(3)).

I hope these answers clarify the rules and legislative requirements about which you had questions. We understand that your State is concerned about being able to expand the lignite-fired electric power generation industry, and that there is some question as to how probable Class I increment violations may affect these expansion plans. Given our understanding that seven existing plants are consuming significant portions of the sulfur dioxide increment, and our understanding that these plants are largely uncontrolled, you might want to consider expanding the available increment for new sources by controlling emissions from some of these existing sources. As you know, the Clean Air Act allows for control of existing sources as necessary to fulfill statutory goals and requirements, such as to protect increment. See generally Alabama Power v. EPA, 636 F.2d 323, 363 (DC Cir. 1979). Our guidance outlines that any reduction in emissions from existing increment-consuming sources that reduced ambient concentrations of pollution in Class I areas would increase the amount of available increment for use by new emission sources.

I trust this information will be helpful in your increment evaluations and your discussions with the Regional Office. Should you have any questions, please call Melissa McCullough of my staff at 919/541-5646 or email her at mccullough.melissa@epa.gov.

Sincerely,*ORIGINAL SIGNED BY JOHN S. SEITZ*

John S. Seitz
Director
Office of Air Quality Planning
and Standards

cc: Richard R. Long, Region VIII
Lea Anderson, OGC

OAQPS/ITPID/IIG:MMccullough:sstephens:RTP(C339-03):919-541-5319:11/29/01